Wirral Community NHS
NHS Trust

CLINICAL PROCEDURE

NAIL SURGERY STANDARD OPERATING PROCEDURE FOR PODIATRISTS

Issue History	Issue Version	Purpose of Issue/Description of Change	Planned Review Date
	One	To inform podiatrists of pertinent guidelines and evidence based practice when performing nail surgery.	2015

Named Responsible Officer:-	Approved by	Date
Head of Podiatry	Quality, Patient Experience and Risk Group	February 2013
Section:- Medicines Management **MMSOP36**	**Target Audience** Trust podiatry staff who perform nail surgery as part of their role	

UNLESS THIS VERSION HAS BEEN TAKEN DIRECTLY FROM TRUST WEB SITE THERE IS NO ASSURANCE THIS IS THE CORRECT VERSION

CONTROL RECORD			
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Version 1	C. Royston	N	

Status – New / Revised / Trust Change

CONTENTS

1. INTRODUCTION

Nail surgery procedures are undertaken to effect the permanent resolution of a variety of acute and painful chronic nail pathologies which cannot reasonably be managed conservatively. The problems may be either congenital or acquired (post traumatic/infective/psoriatic) in origin and includes nail conditions such as onychocryptosis, onychogryphosis, onychomycosis and onychauxis.

Many dystrophic nail deformities can be corrected by a partial nail avulsion in which the minimum amount of nail required to effect resolution is removed. More severe deformation of the nail will require that the entire nail is avulsed.

Both partial and total nail avulsions are undertaken under local anaesthesia and may require chemical ablation of the affected nail matrix to prevent reoccurrence of the problem.

2. TARGET GROUP

All nail surgery procedures must be undertaken by Health Professions Council registered podiatrists who possess current certification in local analgesia and have been trained in the appropriate techniques. The podiatrist undertaking the surgery will be assisted either by a second podiatrist, a trained podiatry assistant or a level 3 student.

3. TRAINING

All staff in the Trust are required to comply with mandatory training as specified in the Trust's Mandatory Training Matrix. Clinical Staff are also required to comply with service specific mandatory training as specified within their service training matrix.

4. RELATED POLICIES

Please refer to relevant Trust Policies and Procedures.

5. INDICATIONS

Nail surgery procedures are suitable for any patient who, following triage and/or medical assessment, presents with an acute or chronic nail condition which cannot reasonably be managed conservatively.

The Podiatry Service will also undertake elective procedures on behalf of patients if this is considered to be in their best interests.

6. CONTRAINDICATIONS

There are no specific contraindications for patients requiring nail surgery. However, special consideration should be given to patients who have been identified as being at an increased risk following triage and/or pre-operative medical assessment.

In addition, due to the possible mutagenic or carcinogenic effects of phenol, patients who are pregnant or breastfeeding should not be exposed to Phenol. These patients should be treated conservatively until they have given birth or have finished breastfeeding. If this is not possible, surgery can be offered without chemical ablation of the nail matrix to provide a temporary solution until such a time when a permanent surgical solution can be effected.

7. CONSENT

Valid consent must be given voluntarily by an appropriately informed person prior to any procedure or intervention. No one can give consent on behalf of another adult who is deemed to lack capacity regardless of whether the impairment is temporary or permanent. However such patients can be treated if it is deemed to be within their best interest. This must be recorded within the patient's health records with a clear rationale stated at all times. Refer to Trust Consent Policy for further information and guidance.

8. PRE-OPERATIVE PROTOCOLS

Referral Pathways

Patients referred to the Community Podiatry department for Nail Surgery via either direct GP Practice or Community Podiatry referral pathways will be triaged by a podiatrist, to ascertain suitability and availability, prior to being allocated an appointment for surgery. Patients who are unsuitable for telephone triage, or who cannot be contacted will be posted an assessment appointment directly.

Patients referred directly from Community Podiatry who have been triaged on clinic will be contacted directly regarding availability.

Documentation and Appointment Allocation

All patients identified as being suitable for a nail surgery assessment (or their parent/guardian in the case of a minor) will receive a copy of 'Notes for Patients Attending for Nail Surgery' together with an appointment for the assessment/surgery to be undertaken at their chosen clinic.

9. SPECIAL PRECAUTIONS

- Although no substantive evidence currently exists relating to the possible mutagenic or carcinogenic effects of phenol, as a precaution the Health Protection Agency has listed it as a Category 3 Mutagen.

- For this reason all podiatry staff who may be pregnant are excluded from undertaking or assisting with nail surgery procedures following disclosure.

- All patients are advised of this risk at the time of their pre-assessment telephone triage and this is reinforced during their initial assessment. Similarly anyone wishing to be present during the procedure is advised of this and excluded from the nail surgery clinic if they are considered to be at risk.

- Due to the causticity and toxicity of phenol all staff involved in the handling and disposal of phenol must wear gloves and protective aprons when exposed to the chemical.

- Risk Assessments, COSHH Assessments and Safety Data Sheets regarding the storage, handling and disposal of Phenol must be available to all staff undertaking this procedure

10. EQUIPMENT

Podiatry nail surgery instrument pack. Containing:-

1 Beaver Handle
1 Thwaites Nail Nippers
1 Blacks File
1 Probe
1 Forceps
1 Spencer Wells forceps
1 Mosquito forceps
1 Nail Elevator
1 Spatula
1 Tube gauze applicator

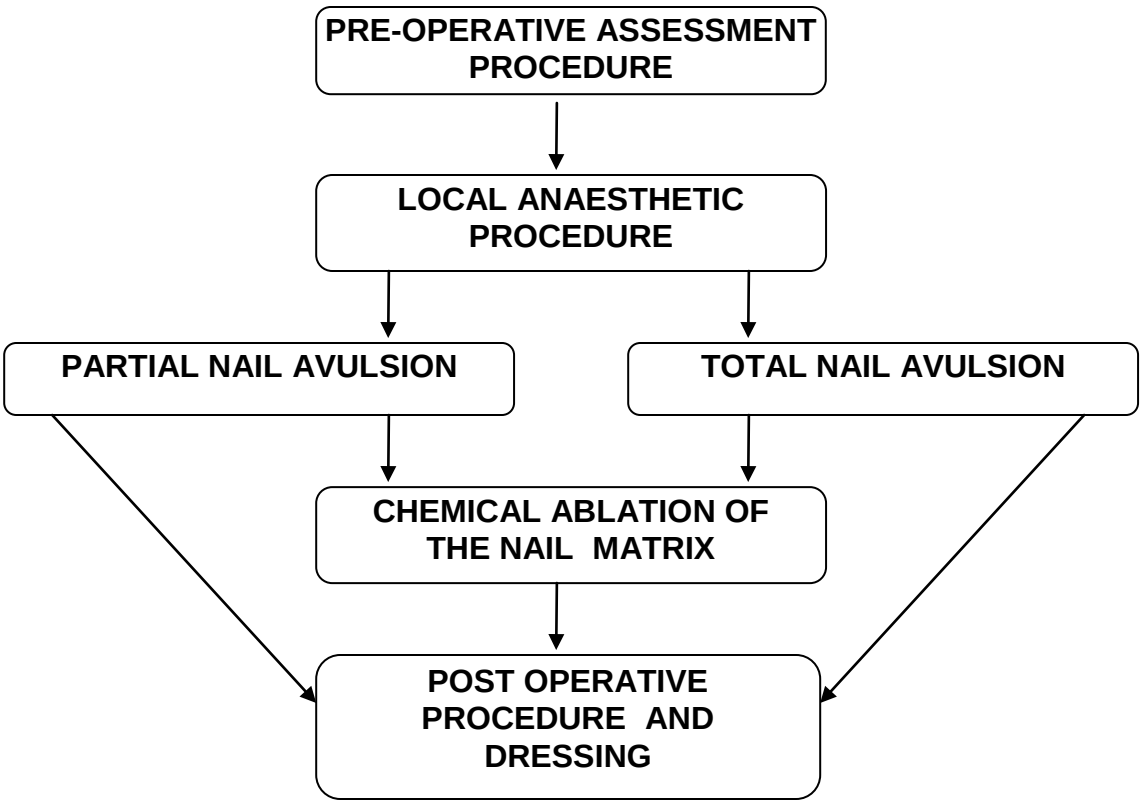
Additional Items

- Appropriate wound care dressings – according to local wound formulary
- Single use disposable Apron
- Sterile single use drapes
- Single use disposable sterile gloves
- Sterile single use scissors
- Sterile single use tourniquet
- Sterile single use Gallipot
- 10% Povidone Iodine in alcohol solution
- Sterile single use Isopropyl Alcohol wipes
- Sterile single use syringe assembly
- Local Anaesthetic
- Sterile No.61 scalpel blade
- 89% Liquified Phenol USP Swabs
- Appropriate cleansing solution (e.g. sterile saline 0.9%) and post procedure dressing
- Sharps container
- Trust approved cleaning wipe

- Anaphylactic shock kit (as outlined in Trust procedure for managing an anaphylactic emergency MMSOP24)

All Podiatry instruments must be decontaminated after each episode of care once the instrument pack has been opened. All instruments are sterilised in compliance with ISO 9001 (2008), ISO 13485 (2003) and Medical Devices Directive 93/42 EEC.

11. PROCEDURAL PATHWAY



12. PRE-OPERATIVE ASSESSMENT PROCEDURE

PROCEDURE	RATIONALE
Verbally confirm the identity of the patient by asking for their full name and date of birth. If the patient is unable to confirm, check identity with family/carer	To avoid mistaken identity
Introduce yourself as a staff member and any colleagues involved at the contact	To promote mutual respect and put the patient at their ease
Wear identity badge which includes name status and designation	For patients to know who they are seeing and to promote mutual respect
Ensure verbal consent for the presence of any other third party is obtained	Students for example, as the patient has the choice to refuse
Explain procedure to patient including risks and benefits and gain valid consent.	To ensure the patient understands procedure and relevant risks
Confirm that the patient has received and understood the 'Notes for Patients Attending for Nail Surgery' patient information leaflet.	To confirm the patient's awareness of the reason for referral.
Ask the patient to remove their footwear and hosiery to visually confirm the podiatric condition requiring surgery.	To confirm the accuracy of the reason for referral.
If the presenting condition has either resolved, or cannot be resolved by nail surgery, the assessment should be terminated and the patient advised of any alternative treatment options. The patient must then be either discharged or referred for further investigation as appropriate. If the condition has a history of resolution and reoccurrence, or the symptoms are masked by drug therapy, the patient may elect to continue with the assessment.	To assess the suitability of the presenting condition for surgery.
Obtain a full medical and surgical history and record the results in the patient record. Ask the patient if they have any known allergies If these checks have been completed in advance, confirm that all details are accurate and current.	To assess the patient's suitability for the procedure. To identify if the patient is known to be allergic to any products used during the procedure
If the patient is suitable for surgery the podiatrist should fully explain the local anesthetic and surgical procedure recommended including any risks involved.	To allow the patient to make an informed decision on whether they wish to proceed.
Confirm that the patient fully understands the post-operative procedure involved and	To clarify the aftercare requirements.

that they have the capability and resources required to comply with the aftercare dressing regime. Advise the patient of the maximum projected healing time expected.	
Invite the patient to express any concerns or queries they may have regarding the procedure.	To facilitate patient awareness.
If contraindications are identified as outlined in the 'Increased Risk Nail Surgery' guidelines or the assessment outcome is unclear or allergies are identified, the surgery should be deferred pending further investigation.	To allow time for consultation and investigation to manage risk factors, or in the case of allergies, allow time to seek advice for suitable alternative products
If the patient elects not to proceed or is deemed unsuitable for the procedure they should be discharged or referred on as appropriate.	To ensure continued care as appropriate
If a GP referred patient does not undergo nail surgery, the GP must be informed of the outcome by letter or on the standard outcome proforma.	To advise the referring GP of the outcome.

13. SURGICAL LIMITATIONS FOR MULTIPLE PROCEDURES

The following limitations must be adhered to for all patients undergoing multiple procedures during a single treatment episode;

- Surgery must be undertaken on each toe individually. Haemostasis must be achieved before commencing surgery at another site.
- If haemostasis cannot be achieved by digital pressure alone a haemostatic dressing must be applied. If this procedure is required the podiatrist is required to commence the whole procedure again if dealing with a second toe.
- Only a single tourniquet may be used at any given time to minimise the duration and enable accurate timing.
- No more than 3 procedures may be undertaken during a single clinical episode.
- Patients should be rebooked if any additional interventions are required.

14. CONSENT PROCEDURE

In line with Trust policy it is the responsibility of the Podiatrist to obtain valid consent from the patient prior to the administration of local anaesthesia. A signed copy of the appropriate consent form must be retained within the patient record.

- All parents or guardians of patients under sixteen years of age are advised during the telephone triage that they will be required to give consent on the day of surgery. If this is not possible, written consent will be obtained prior to surgery and included in the patient's records.

- If consent for a young person or an adult who lacks the capacity to consent is required from Social Services this will normally be arranged by the Head/Deputy Head of Podiatry prior to the nail surgery appointment.

- If valid consent cannot be obtained no treatment should be undertaken.

15. LOCAL ANAESTHETIC PROCEDURE

PROCEDURE	RATIONALE
Clean all hard surfaces to be used during the procedure with Trust approved cleaning wipe	The environment should be visibly clean to minimise opportunity for microbial contamination
Check that all surgical and pharmaceutical products are available current and intact.	To comply with Trust policy
Instruct the assistant practitioner to check the contents of the Anaphylactic Shock Kit against the pre-printed laminated card. Expiry dates are to be checked for all items in anaphylactic shock kit.	To comply with Trust policy
Calculate the maximum safe dosage of the local anaesthetic used relative to the patient's body weight and note this in the record.	To ensure the maximum safe dosage is not exceeded.
Recheck the contents and expiry date of the local anaesthetic cartridge prior to assembly and note the serial number in the record.	To ensure traceability in accordance with the Trust Policy.
Lay the patient in a supine position unless they specifically request to remain seated.	To minimise the risk of fainting and vaso-vagal syncope.
Decontaminate hands prior to procedure	To reduce the risk of transfer of transient micro-organisms on the healthcare worker's hands
Apply single use disposable apron	To protect clothing or uniform from contamination and potential transfer of micro-organisms

Apply single use disposable non-sterile gloves	To reduce the risk of transfer of transient micro-organisms on the healthcare worker's hands
Swab the injection sites with a sterile isopropyl alcohol wipe using a circular motion for at least 30 seconds and allow to dry thoroughly.	To reduce the risk of infection
Using an Aseptic Non Touch technique (ANTT), remove the disposable syringe, insert the local anaesthetic cartridge into the body of the syringe and attach the plunger.	To prevent contamination of key parts
Slide back the safety cover and remove the sheath from the needle.	To enable the syringe.
Insert the needle from the dorsal surface of the base of the lateral phalanx of the toe until the skin blanches on the plantar surface. Inject evenly whilst withdrawing the needle until the required quantity of anesthetic is dispensed.	To effect digital ring block anaesthesia.
Repeat the procedure for the medial side of the toe.	To effect digital ring block anaesthesia.
If the syringe is to be reused at the same injection site, slide the safety cover to the first (non-locking) position. Under no circumstances should the needle be re-sheathed.	To prevent inoculation injury
Control any post-injection bleeding by applying digital pressure with a sterile swab.	To arrest haemorrhage and contain bodily fluids.
If the cartridge is fully discharged, slide the safety cover to the second (locking) position and dispose of in a sharps container	To prevent inoculation injury
Check for the onset and effectiveness of local anaesthesia using only digital pressure and a sterile neurotip. All toes requiring nail surgery should be tested for complete anaesthesia prior to surgery.	To ensure a painless procedure
Once anaesthesia has been established dispose of the neurotip in a sharps container.	To prevent inoculation injury
On completion of procedure remove and dispose of PPE to comply with Trust policy	To prevent cross infection and environmental contamination
Decontaminate hands following removal of Personal Protective Equipment	To remove any accumulation of transient and resident skin flora that may have built up under gloves and possible contamination following removal of PPE

16. PARTIAL NAIL AVULSION

PROCEDURE	RATIONALE
Clean all hard surfaces to be used during the procedure with Trust approved cleaning wipe.	The environment should be visibly clean to minimise opportunity for microbial contamination.
Check that all surgical & pharmaceutical products for nail surgery are available, current and intact.	To comply with Trust policy
Decontaminate hands prior to procedure	To reduce the risk of transfer of transient micro-organisms on the healthcare worker's hands
Apply single use disposable apron	To protect clothing or uniform from contamination and potential transfer of micro-organisms
Apply single use disposable sterile gloves in a manner which prevents the outer surface of the sterile glove being touched by a non sterile item	To maintain asepsis and prevent contamination of key parts/key sites
Lay the sterile drape over the Mayo table.	To provide an aseptic field.
The assistant practitioner is to open and offer, without touching the contents; a. Sterile Gallipot, b. Packs of sterile absorbent swabs, to be placed on the drape by the podiatrist.	To maintain asepsis and prevent contamination of key parts/key sites.
The outer wrap of the nail surgery instrument pack is to be released by the assistant and the sterile inner wrap removed by the podiatrist using ANTT and placed on the Mayo table.	To maintain asepsis and prevent contamination of key parts/key sites
The assistant practitioner is to remove the Scan Track instrument identification label and adhere it to the operation report.	To ensure traceability in accordance with the Medical Devices Policy.
Place the instrument pack onto the sterile drape on the mayo table and remove and retain the inner wrap.	To prevent transmission of micro-organisms onto aseptic field.
Check the instruments against the inventory included in the pack.	To ensure the correct instruments have been supplied.
Instruct the assistant practitioner to dispense 10% povidone iodine in alcohol solution into the galipot.	To maintain asepsis.
Direct the assistant practitioner to open the	To maintain asepsis and for key part and key

outer wrap and offer a suitable sterile tourniquet and place this on the sterile drape on the Mayo table.	site protection.
Instruct the assistant practitioner to open the outer wrap and offer a No. 61 sterile scalpel blade. Insert the blade into the chuck of the scalpel handle and tighten with sterile forceps.	To maintain asepsis and prevent contamination of key parts/ key site.
Instruct the assistant practitioner to open the outer wrap and offer a sterile drape. Remove the drape and wrap it around the patient's foot leaving the area requiring surgery exposed.	To establish an aseptic field.
Place the Mayo table to obscure the patient's view of the surgery unless they have specifically requested to observe the procedure.	To minimise the risk of fainting and vaso-vagal syncope.
Swab the area with 10% povidone iodine in alcohol solution, in a proximal to distal direction with a circular motion, using a folded sterile swab held by sterile forceps and allow to dry thoroughly.	To prevent wound infection/sepsis
Place the tourniquet on the toe.	To ensure a blood free procedure.
Verbally instruct the assistant practitioner to note the time.	To permit the total tourniquet time to be calculated.
If necessary elevate the paronychium of the sulcus/sulci involved using a sterile nail elevator or Black's file.	To minimise tissue damage.
Insert the flat blade of the sterile Thwaite's cutter under the hyponychium and maintaining close contact with the nail plate push this until the eponychium is reached.	To separate the nail tissue to be excised.
Place the prepared No. 61 blade into the dissection of the nail and split the remainder of the nail from the eponychium until reduced resistance is detected.	To ensure a single clean cut.
Clamp the sterile mosquito forceps onto the section of nail to be removed and excise the nail using an internally rotating motion.	To facilitate the removal of the nail section.
Check the sulcus and free edge of the nail with the Black's file to ensure no nail fragments remain.	To minimise regrowth and facilitate healing.
Repeat the procedure for the remaining sulcus if required.	

17. TOTAL NAIL AVULSION

PROCEDURE	RATIONALE
Instruct the assistant practitioner to dispense 10% povidone iodine in alcohol solution into the galipot.	To maintain asepsis and prevent contamination of key parts/key site
Instruct the assistant practitioner to open the outer wrap and offer a suitable sterile tourniquet and place this on the sterile drape on the Mayo table.	To maintain asepsis and prevent contamination of key parts/key site
Instruct the assistant practitioner to open the outer wrap and offer a sterile drape. Remove the drape and wrap it around the patient's foot leaving the area requiring surgery exposed.	To establish an aseptic field.
Place the Mayo table to obscure the patient's view of the surgery unless they have specifically requested to observe the procedure.	To minimise the risk of fainting and vaso-vagal syncope.
Swab the area with 10% povidone iodine in alcohol solution, in a proximal to distal direction with a circular motion, using a folded sterile swab held by sterile forceps and allow to dry thoroughly.	To prevent wound infection/sepsis
Place the tourniquet on the toe.	To ensure a blood free procedure.
Verbally instruct the assistant practitioner to note the time.	To permit the total tourniquet time to be calculated.
Loosen the paronychium with a sterile Black's file or nail elevator.	To minimise tissue damage.
Insert a suitably sized sterile nail elevator under the hyponychium and maintaining close contact with the nail plate loosen the entire nail from the matrix.	To minimise tissue damage.
Loosen the dorsal surface of the nail plate from the eponychium with a blacks file or elevator if necessary.	To minimise tissue damage.
Clamp the sterile mosquito forceps onto the nail to be removed and excise the nail.	To facilitate removal of the nail.
Check that all nail tissue has been excised using a sterile Black's file.	To minimise regrowth and facilitate healing.

18. CHEMICAL ABLATION OF THE NAIL MATRIX

All staff involved in this procedure must be aware of the special precautions listed in section 9

PROCEDURE	RATIONALE
Ensure that the entire area to be phenolised is free from blood or other loose organic tissue.	To allow effective chemical ablation.
Instruct the assistant practitioner to open and offer a sterile liquefied phenol USP 89% swab.	To maintain asepsis and prevent contamination of key parts/key sites.
Break the seal of the swab by carefully pressing the applicator into the reservoir.	To release the phenol.
Verbally instruct the assistant practitioner to time 120 seconds, advising the podiatrist every 30 seconds.	To allow the phenolisation time to be monitored.
Apply the phenol to all exposed areas of the nail bed for 120 seconds.	To achieve controlled chemical cautery.
Clean the area with a sterile swab.	To remove any remaining traces of phenol

19. POST OPERATIVE PROCEDURE AND DRESSING

PROCEDURE	RATIONALE
Remove the tourniquet by pulling the tag and cutting through it.	To restore the vascular supply to the toe.
Verbally instruct the assistant practitioner to note the time.	To permit the total tourniquet time to be calculated.
Check for capillary refill.	To confirm the circulation has been restored.
Arrest any haemorrhage with a sterile swab and digital pressure.	To achieve haemostasis.
Instruct the assistant practitioner to open and offer a non-adherent polyester mesh dressing avoiding contact with key parts.	To maintain asepsis and prevent contamination of key part/key sites
Apply the dressing directly to the wound site.	To prevent adhesion of the dressings to the wound.
Instruct the assistant practitioner to open and offer an absorbent haemostatic dressing.	To maintain asepsis and prevent contamination of key part/key sites
Apply the haemostatic dressing over the polyester mesh dressing. If bleeding is profuse apply additional haemostatic dressings as necessary.	To control post-operative haemorrhage
Instruct the assistant practitioner to open and offer two absorbent polyester film dressings and apply these over the	To maintain asepsis and prevent contamination of key part/key sites.

haemostatic dressings. Further absorbent dressings may be applied if necessary.	
Retain the dressings with a tubular bandage and secure in place with adhesive tape.	

- If the gloves of the podiatrist undertaking the procedure are contaminated by phenol or any bodily fluid, the podiatrist must undertake hand decontamination and apply another pair of disposable single use sterile gloves before applying the post operative dressing.

- Following the completion of surgery the patient should be retained with their legs elevated until any bleeding has been controlled. If there is significant strike through onto the dressing this may either be removed and replaced, or supplemented with additional absorbent dressings before the patient is discharged.

20. DISCHARGE AND AFTERCARE REGIME.

- Following completion of the procedure the details of the surgery and drugs administered should be noted on the 'Nail Surgery Post Operative Information' letter.

- The contents of the 'Nail Surgery Post Operative Information' letter should be explained fully to the patient (or patient's guardian or responsible person) outlining the options for accessing emergency care.

- All patients must be offered a redressing appointment within 7 days of the procedure. This appointment should be documented on the 'Nail Surgery-Post Operative Information' letter. The patient should be advised to present the letter at the clinic at which the redressing has been arranged.

- In exceptional circumstances this redressing may be undertaken by other agencies such as GP Practices, Workplace Occupational Health Departments or within the private sector. Such patients should be advised that they retain access to the Podiatry Department for consultation and advice if required.

- The patient should be advised to keep the dressing clean, dry and intact until they attend for their initial redressing.

- All referring GPs should be advised of the procedure undertaken and the expected resolution time via the GP Outcome letter or advised on the standard failed appointment letter if the patient fails to attend.

21. DECONTAMINATION AND DISPOSAL

Following the completion of each patient it is the responsibility of the Podiatrist and Assistant Practitioner to check that;

- All disposable syringes are to be 'locked off' and disposed of in accordance with the Trust policy prior to disposal.

- All scalpel blades are removed in accordance with the Trust policy before returning the instruments for sterilisation.

- Any used or opened phenol swabs are disposed of in accordance with Trust policy.

- All clinical waste is disposed of in accordance with the Trust's clinical waste protocols.

Following the completion of each session it is the responsibility of the Podiatrist and Assistant Practitioner to check that;

- All reusable instruments are returned for central sterilisation with the appropriate documentation.

- All unused nail surgery equipment, sharps and medicines are returned to storage and secured in accordance with the Trust protocols.

- Any shortages are reported to the podiatry office or the clinic lead as appropriate.

- All clinical waste is disposed of in accordance with the Trust's clinical waste protocols.

22. WHERE TO GET ADVICE FROM

Staff can obtain further advice from their line manager when required or from peer review as necessary.

23. INCIDENT REPORTING

Clinical incidents or near misses must be reported using the Trust's incident reporting system.

24. SAFEGUARDING

In any situation where staff may consider the patient to be a vulnerable adult, they need to follow the Trust Safeguarding Adult Policy and discuss with their line manager and document outcomes.

25. REFERRALS

Any referrals to health professionals, therapists or other specialist services must be followed up and all professional advice or guidance documented in the patients health records.

26. EQUALITY ASSESSMENT

During the development of this procedure the Trust has considered the clinical needs of

each protected characteristic (age, disability, gender, gender reassignment, pregnancy and maternity, race, religion or belief, sexual orientation). There is no evidence of exclusion of these named groups.

If staff become aware of any clinical exclusions that impact on the delivery of care a Trust Incident form would need to be completed using the Trust's incident reporting system and an appropriate action plan put in place.

27. REFERENCES

The use of 89% Phenol in toenail matrixectomy, Durham School of Podiatric Medicine (2007).